

ED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Atty. Docket No.:

003921.00248

Amr M. MOHSEN

Serial No.:

10/052,671

Publ. No.

20020100010

Filed:

For:

January 17, 2002

Field Programmable Printed Circuit

Board

Group Art Unit:

2128

Examiner:

Hugh M. Jones

Confirmation No. 6141

INFORMATION DISCLOSURE STATEMENT

The Honorable Commissioner for Patents Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22314

Sir:

Pursuant to 37 C.F.R. §1.56, the attention of the U.S. Patent and Trademark Office is hereby directed to the references listed in the attached Forms PTO/SB/08. The references listed in standard type-face are references cited and made of record in parent application 08/632,298, filed April 12, 1996, from which priority is claimed. Accordingly, pursuant to 37 C.F.R. §1.98(d), a copy of these references is omitted. The references appearing in bolded type-face were not made of record in the parent application. Pursuant to the Office's October 12, 2004 OG Notice, it is understood that 37 C.F.R. §1.98 no longer requires submission of a copy of each cited U.S. patent and published patent application, unless such copies are specifically required by the Office. Accordingly, a copy of the bolded U.S. patents and published applications is also omitted. A copy of the other listed references appearing in bolded type-face is enclosed.

Applicant submits this information so that the Patent and Trademark Office may, in the first instance, determine any materiality thereof to the claimed invention. It is respectfully requested that the information be formally considered during the prosecution of this application,

Attorney Docket No.003921.00248

Serial No.: 10/052,671

and that the listed references appear among the "References Cited" on any patent to issue herefrom.

The present Information Disclosure Statement is being filed after the mailing date of the first Office Action on the merits, but before a Final Office Action or Notice of Allowance. Pursuant to 37 CFR §1.97(c)(2), this Statement is accompanied by the \$180.00 fee specified in 37 C.F.R. §1.17(p). If there is any discrepancy in the fee, the Commissioner is authorized to charge our Deposit Account No. 19-0733.

Respectfully submitted,

Christopher L. McKee Registration No. 32,384

BANNER & WITCOFF, LTD, 1001 G Street, N.W., 11th Floor Washington, D.C. 20001-4597 (202) 824-3000

Date:

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PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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W & TRACK Substitute for form 1449A/PTO Complete if Known Application Number 10/052,671 INFORMATION DISCLOSURE January 17, 2002 Filing Date STATEMENT BY APPLICANT Amr M. MOHSEN First Named Inventor Art Unit 2128 (Use as many sheets as necessary) Hugh M. Jones Examiner Name 003921.00248 of 7 Attorney Docket Number Sheet

	T	Document Number	U.S. PATE			atentee or Applicant of		
Examiner Initials *	Cite No. ¹	Number - Kind Code ² (if known)	Publication I MM-DD-YY	Date Cited Document			Pages, Columns, Lines, Where Passages or Relevant Figures Appear	
		3,849,872	11/1974		Hubac	her	_	
		3,867,759	02/25/75		Siefker			
		4,124,899	11/07/197	8	Birkner	et al.		
		4,146,902	03/1979		Tanimo	oto et al.		
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		4,441,075	04/1984		McMah	on		
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		4,578,773	03/1986	03/1986 Desai et al. 08/1984 Stopper		et al.		
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_		4,509,008	04/1985		Das Gu	ıpta et al.		
			FOREIG	N PA	TENT DO	CUMENTS		
Examiner Initials*	Cite No. ¹	Foreign Patent Doct	•		cation Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		EP 177,261 A2		04/0	9/1986	Xilinx, Inc.		
		EP 204,034 A2		12/1	986			
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		EP 0 335 281 A2		10/0	4/1989			
		EP 0 481 703 A2		04/2	2/1992			
Examiner Signature					Date Consider	red		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. Alexandria, VA 22313-1450.

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Substitute	e for form 1449A/PTC)			Complete if Known
				Application Number	10/052,671
INFO	RMATION	DIS	CLOSURE	Filing Date	January 17, 2002
STA	TEMENT B	Υ ΑΙ	PPLICANT	First Named Inventor	Amr M. MOHSEN
				Art Unit	2128
	(Use as many she	ets as	necessary)	Examiner Name	Hugh M. Jones
Sheet	2	of	7	Attorney Docket Number	003921.00248

			U.S. PATENT (DOCUMENTS	
Examiner Initials *	Cite No.1	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		4,631,686	12/23/1986	Ikawa et al.	
		4,638,246	01/1987	Blank et al.	
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Examiner Cite No.1	Cito	Foreign Patent Document		Name of Patentee or	Pages, Columns, Lines, Where Relevant	
	Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T⁵	
		EP 0 518 701 A2	12/16/1992			
		JP UM 53-141353	09/12/78			Partial
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		WO 85/03804	08/1985			
		WO 90/04233	04/1990			
		JP 58-117,469	07/13/1983			Partial

Examiner Signature	Date Considered	

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Substitute for form 1449A/PTO Complete if Known Application Number 10/052,671 INFORMATION DISCLOSURE January 17, 2002 Filing Date STATEMENT BY APPLICANT Amr M. MOHSEN First Named Inventor Art Unit 2128 (Use as many sheets as necessary) Examiner Name Hugh M. Jones of 7 003921.00248 Attorney Docket Number

Sneet	3	01 /			AllOTTE	y Docket Number	003921.0	JU2-70		
				U.S. PAT	ENT D	OCUMENTS				
Examiner Initials *	Cite No. ¹	Document Number Number - Kind Code ² (if known	wn)	Publicatio MM-DD-		Name of Patentee or Applicant of Cited Document		Pages, Columns, Lines, Where Rele Passages or Relevant Figures Appear		evant
		4,826,776		05/1989		Brandt et al.				
		4,833,402		05/1989		Boegh-Peterse	en			
		4,840,924		06/1 989)	Kinbara				
		4,847,732		07/1989		Stopper et al.				
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-		4,870,302		09/1989		Freeman				
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Examiner	Cite	Foreign Patent Document							Pages, Columns, Lines, Where Relevant	
Initials*	No.1	Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)		cation Date DD-YYYY	Name o	f Patentee or Applicant of	of Cited Docume	ent	Passages or Relevant Figures Appear	T ⁶
_		JP 59-182877	12/0	05/1984						Partial
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		JP 62-159060	07/1	15/1987						Partial
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		GB 2 180 382 A	03/2	25/1987	Pilking Limite	gton Micro-Elec d	tronics			
		WO 87-02827	05/0	7/1987	4C Ele	ectronics, Inc.				
Examiner Signature						Date Considered				

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Substitute for form 1449A/PTO Complete if Known 10/052,671 Application Number INFORMATION DISCLOSURE January 17, 2002 Filing Date STATEMENT BY APPLICANT Amr M. MOHSEN First Named Inventor Art Unit 2128 (Use as many sheets as necessary) Hugh M. Jones Examiner Name of 17 Attorney Docket Number 003921.00248 Sheet

	_		U.S. PATENT (r
Examiner Initials *	Cite No. ¹	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevan Passages or Relevant Figures Appear
		4,979,138	12/18/1990	Arrathoon	
-		5,015,885	05/14/1991	El Gamal et al.	
		5,036,473	07/1991	Butts et al.	
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		5,544,069	08/06/1996	Mohsen	
	<u> </u>	<u> </u>	<u> </u>		
Examiner Signature				Date Considered	

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Substitute	for form 1449B/PTC)			Complete if Known
	DIATION	DIC	OL OCUDE	Application Number	10/052,671
			CLOSURE	Filing Date	January 17, 2002
STAT	EMENT B	ΥA	PPLICANT	First Named Inventor	Amr M. MOHSEN
				Art Unit	2128
	(Use as many she	ets as	necessary)	Examiner Name	Hugh M. Jones
Sheet	5	of	7	Attorney Docket Number	003921.00248

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Barber et al., "A 64 x 17 Non-Blocking Cross Point Switch," 1988 IEEE Int'l. Solid-State Circuits Conf., 18 Feb. 1988, pp. 116, 117 and 142.	
		Bogdan, "An Electrically Programmable Silicon Circuit Board," <u>BUSCON/87 West</u> <u>Proceedings and SYSCON West</u> , 1987, pp. 472 - 476.	
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		Donnell, "Crosspoint Switch: A PLD Approach," <u>Digital Design</u> , July 1986, pp. 40 – 42 and 44.	
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		Guo et al. "A 1024 Pin Universal Interconnect Array With Routing Architecture," Proceedings of the Custom Integrated Circuits Conference, 3 - 6 May 1992, pp. 4.5.1 - 4.5.4.	
		Hantusch, "The PIM: A Progranunable Interconnection Module," <u>IEE Colloauim Dig.</u> , Colloquim on IC Design-Gate Arrays, 21 Nov. 1984, pp. 8.1- 8.4.	
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		Lauther, "A Min-Cut Placement Algorithm for General Cell Assemblies Based on a Graph Representation," 16th Design Automation Conf., 25 - 27 June 1979, pp. 1-10, reprinted in Compo Paps. Design Automation Conf., 1988, pp. 182 - 191.	
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		Quinnell, "Digital Switches Provide Bus Connections With No Additional Gate Delays," <u>EDN.</u> 18 July 1991, page 64.	

Examiner Date Considered	_			
	Evaminar		Date	
Signature Considered	Examiner	1	Date	
	Signature		Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

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Substitute	e for form 1449	В/РТО			Complete if Known	
		0N DIG	OL COURT	Application Number	10/052,671	
			CLOSURE	Filing Date	January 17, 2002	
STA	TEMENT	ГВҮА	PPLICANT	First Named Inventor	Amr M. MOHSEN	
				Art Unit	2128	
	(Use as mar	ny sheets as	necessary)	Examiner Name	Hugh M. Jones	
Sheet	6	of	7	Attorney Docket Number	003921.00248	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
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		Wooley et al, "Active Substrate System Integration," IEEE. July 1987, pp. 468 - 471.	
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		"Gallium Arsenide 64 x 64 Crosspoint Switch," preliminary data sheet, Vitesse Semlconouerot Corporation, Feb. 1991, pp. 1 - 10.	
		"Logically Controlled Chip Interconnection Technique," <u>IBM Tech. Discl. Bull.</u> . Vol. 32, No. 3B, Aug. 1989, pp. 294 - 299.	
		"AD75019 16 x 16 Crosspoint Switch Array," data sheet, Analog Devices, 1991, 4 pp.	
		HP-12C Owner's Handbook and Problem Solving Guide, Hewlett-Packard Company, Palo Alto, CA, 1981, pp. 220-221	
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		Blodgett, Albert, "A Multilayer Ceramic Multichip Module," IEEE Transactions on Components, Hybrids and Manufacturing Technology,vol. CHMT-3, No.4, December 1980, pp. 634-37	
		Seraphim, D.P. and Feinberg, I., "Electronic Packaging Evolution in IBM," IBM J. Res. Develop., Vol. 25, No. 5, September 1981, pp. 617-29	! !

Examiner	Date	
Signature	Considered]
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INIEO	DMATION DI	OL COURT	Application Number	10/052,671	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Filing Date	January 17, 2002	
			First Named Inventor	Amr M. MOHSEN	
			Art Unit	2128	
(Use as many sheets as necessary)		Examiner Name	Hugh M. Jones		
Sheet	7 of	7	Attorney Docket Number	003921.00248	

		NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			
		Palesko, C. and Akers L., "Logic Partitioning for Minimizing Gate Arrays," IEEE			
		Transactions on Computer Aided Design of Integrated Circuits and Systems, Vol.			
		CAD-2, No. 2, April 1983, pp. 117-21			
-		Stroud, C. and Munoz, R., :CONES: A System for Automated Synthesis of VLSI			
		and Programmable Logic from Behavioral Models," IEEE International Conference			
		on Computer Aided Design, November 11-13, 1986, pp. 428-31			
		The Programmable Gate Array Design Handbook, Xilinx, Inc., 1986			
		Microelectronics Packaging Handbook, 1989			
		Circuits, Interconnections and Packaging for VLSI, 1990			
		Handbook of Microelectronics Packaging and Interconnection Technologies, Chapter 1, 1985			
		Handbook of Microelectronics Packaging and Interconnection Technologies, Chapter 7, 1985			
		Kit Offers Instant Insights, Electronics, January 23, 1975, p. 70	······		
		Horowitz and Hill, The Art of Electronics, Chapter 12 [copyright 1980 and 1989]			
		"Synthesis of Logic Functions on an Array of Integrated Circuits," Contract Report AFCRL-66-298, UNIVAC Division of Sperry Rand Corp., Blue Bell, PA, Oct. 31, 1965.	•		

Examiner	Date	-
Signature	Considered	

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Sheet

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of

 Complete if Known

 Application Number
 10/052,671

 Filing Date
 January 17, 2002

 First Named Inventor
 Amr M. MOHSEN

 Art Unit
 2128

 Examiner Name
 Hugh M. Jones

 Attorney Docket Number
 003921,00248

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		U.S. District Ct. (N.D. Cal.) Civil Docket for Case # 3:04-cv-01522-EDL (Aptix Corp. v. Willmore et al.)	
		Complaint filed in Aptix Corp. v. Willmore et al. U.S. District Ct. (N.D. Cal.) Civil Docket for Case # 3:98-cv-00762-WHA (Aptix Corp. et	
		al. v. Quickturn Design Systems) Findings of Fact and Conclusions of Law After Evidentiary Hearing on Motion for Terminating Sanctions in Aptix Corp. v. Quickturn Design Systems, Inc., Case No. 98-	
		00762, 2000 WL 852813 (N.D. Cal. 2000) Aptix Corp. v. Quickturn Design Systems, Inc., 13 Fed.Appx. 972 (Fed. Cir. 2001) (Rule 36 affirmance)	
		Aptix Corp. v. Quickturn Design Systems, Inc., 269 F.3d 1369 (Fed. Cir. 2001)	
		Aptix Corp. v. Quickturn Design Systems, Inc., 148 Fed.Appx. 924 (Fed. Cir. 2005)	
· · ·		Joint Claim Construction Statement, in <i>Aptix Corp. v. Quickturn Design Systems</i> (Docket # 45)	
		Aptix's and Meta's Memorandum on Claim Construction, in Aptix Corp. v. Quickturn Design Systems, Inc. (Docket # 266)	
		Declaration of Dr. Harry L. Tredennick III in Support of Plaintiffs' Memorandum on Claim Construction in Aptix Corp. v. Quickturn Design Systems (Docket # 268)	
		Response by Aptix and Meta to Quickturn's Memorandum on Claim Construction, in Aptix Corp. v. Quickturn Design Systems (Docket # 297)	
		Tentative Ruling After Claim Construction Hearing, in Aptix Corp. v. Quickturn Design Systems (Docket # 314)	

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Listing of Related Litigation Papers Submitted Responsive to Request for Information

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INFORMATION DISCLOSURE				Application Number	10/052,671	
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STATEMENT BY APPLICANT			PPLICANT	First Named Inventor	Amr M. MOHSEN	
				Art Unit	2128	
(Use as many sheets as necessary)		Examiner Name	Hugh M. Jones			
Sheet	2	of	2	Attorney Docket Number	003921.00248	

Aptix's Memorandum Re Comparison of Claims of '638 and '069 Aptix Patents, in Aptix
Corp. v. Quickturn Design Systems (Docket # 316)
Final Ruling After Claim Construction Hearing, in Aptix Corp. v. Quickturn Design Systems (Docket # 352)
Quickturn's Closing Brief for Evidentiary Hearing, in Aptix Corp. v. Quickturn Design Systems (Docket # 456)
Plaintiff Aptix Corporation's Post-Hearing Brief, in Aptix Corp. v. Quickturn Design Systems (Docket # 457)
Meta and Mentor Graphics' Post-Evidentiary Hearing Brief, in Aptix Corp. v. Quicktum Design Systems (Docket # 459)
Notice of Motion and Motion for Summary Judgment that U.S. Patent 5,544,069 is Invalid for Failure to Comply with 35 U.S.C. §112, in <i>Aptix Corp. v. Quickturn Design Systems</i> (Docket # 475)
Declaration of Jeffrey A. Miller in Support of Quickturn's Motion for Summary Judgment that U.S. Patent 5,544,069 is Invalid for Failure to Comply with 35 U.S.C. §112, in <i>Aptix Corp. v. Quickturn Design Systems</i> (Docket # 478)
Plaintiffs' Notice of Motion and Motion for Summary Judgment on Quickturn's (1) Inequitable Conduct Defense; (2) Inequitable Conduct Counterclaim; and (3) Derivation Defense; Points and Authorities in Support, in Aptix Corp. v. Quickturn Design Systems (Docket # 480)
Quickturn's Petition to File its Motion Re: Derivation and Memo in Support Thereof One Day Late, in Aptix Corp. v. Quicktum Design Systems (Docket # 485)
[Proposed] Order Granting Quickturn's Motion for Summary Judgment of Invalidity of Mohsen U.S. patent No. 5,544,069 Under 35 U.S.C. §102(f), in Aptix Corp. v. Quickturn Design Systems

	 	
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